

ASSESSING CONNECTICUT'S HEALTH INFORMATION TECHNOLOGY & HEALTH INFORMATION EXCHANGE SERVICES

Summary Findings of Current State, Future Needs, and Recommendations for Action

May 23, 2017

Report prepared for:

The Connecticut
Health Information
Technology Advisory
Council

Prepared by:

Michael Matthews, Senior Engagement Director
Carol Robinson, Principal

CedarBridge Group LLC
515 NW Saltzman Rd. #661
Portland, OR 97229
www.cedarbridgegroup.com



CEDARBRIDGE
GROUP

Table of Contents

Acknowledgements	2
Executive Summary	3
Priority Recommendations for the State	4
Background and Overview of Methodology	7
Summary of Findings	11
Patients and Consumers	11
Environment	12
Tools	13
Governance	16
Themes and Considerations	18
Recommendations	21
Appendix A: Glossary	22
Appendix B: Stakeholder Organizations and Engagement Type	27

Acknowledgements

The State of Connecticut is deeply grateful to all of those who participated in this environmental scan and stakeholder engagement process. You have generously shared information and perspectives through interviews, focus groups, and surveys. Just as meaningfully, you have displayed deep commitment to your work and dedication to the health and well-being of the citizens of Connecticut.

Executive Summary

The following report, *Assessing Connecticut's Health Information Technology and Health Information Exchange Services: Summary Findings of Current State, Future Needs, and Recommendations for Action* is a summary of several documents developed for the Health Information Technology Program Management Office (HIT PMO), led by the Connecticut Health Information Technology Officer (HITO), with funding and supplemental support from the State Innovation Model Program Management Office (SIM PMO). In total, the collection of documents will form an environmental scan and assessment of the current availability and use of health information exchange (HIE) services and health information technology (health IT) tools in Connecticut by each stakeholder segment. The environmental scan also curates Connecticut stakeholders' understandings, attitudes, beliefs, aspirations, and levels of confidence in a future as envisioned by Connecticut Public Act No. 16-77 (2016), where health IT and HIE services will support enhancements in the efficiency and effectiveness of healthcare. The report identifies key areas where:

- investments in enhanced new health IT services should be made;
- improvements in interoperability between existing systems should be strongly encouraged or required;
- requirements for coordination and connectivity among state agency systems and private sector initiatives should be developed; and
- governance of current and future health IT and HIE technologies should be strengthened.

The technology needs described in the environmental scan have been identified through a rigorous process, beginning with a document review of earlier unsuccessful efforts to stand up HIE services, from the substantive work that has been done through Connecticut's State Innovation Model (SIM) grant, and from the efforts of the Connecticut Legislature. A broad stakeholder engagement process was deployed, in which individuals and organizations shared their perspectives on Connecticut's "current state" of health IT and HIE services to meet their business needs and the needs of their patients or clients. Additionally, stakeholders were asked to provide their perspective on their ability to meet the State's "Quadruple Aim" of better health, better care, lower costs, and improved clinician experience.

While documenting stakeholders' thoughts on currently available health IT services, interviewees were also asked to put forward wish lists for their desired "future state" of a health IT infrastructure to meet the needs of businesses and individuals in Connecticut. In addition to technology features and functions, interviewees were engaged on the topics of governance, financing, and what frequently was referenced as "the elephant in the room," the essential element of trust in how health IT services would be delivered. Having gathered qualitative data from group interviews, focus groups, and surveys of 282 individuals representing 136 organizations, CedarBridge Group applied subject matter knowledge to develop the findings and recommendations described in this report.

CALL TO ACTION

Priority Recommendations for the State

1. Connecticut must keep **patients and consumers as a primary focus** in all efforts to improve health information technology (health IT) or health information exchange (HIE), including addressing health equity and the social determinants of health.
2. Connecticut must **leverage existing interoperability initiatives**, including existing or planned private investments and relationships with state-based HIEs and the national initiatives of eHealth Exchange, CareQuality, CommonWell, and Surescripts.
3. Connecticut must **implement core technology** that complements and interoperates with systems currently in use by private sector organizations. At a minimum, core technology should include the ability to authenticate identities of patients/consumers and providers through a **statewide Healthcare Directory** including providers, healthcare delivery organizations, community service organizations, etc., linked to a **statewide Master Patient Index** through strong attribution capabilities.
4. Connecticut must establish **“rules of the road”** to provide an appropriate policy framework that:
 - engenders trust amongst all stakeholders through the committed and transparent participation of public and private sector leaders who have been legislatively appointed to represent Connecticut’s interests on the Health IT Advisory Council, and of all future subgroups designated to bring forward recommendations to the Council;
 - discourages inertia and duplicative solutions to shared problems facing the healthcare community, particularly amongst state agencies and other key stakeholders;
 - creates patient- and provider-centric, solutions-oriented cooperation and conversation in the healthcare community, particularly amongst state agencies and other key stakeholders;
 - safeguards consumers’ interests in privacy, security, confidentiality, and patient safety;
 - encourages market-based solutions that lead to broad availability and financial sustainability of healthcare technology services; and
 - defines legislative and regulatory oversight as needed for enforcement and compliance.
5. Connecticut must support provider organizations and networks assuming accountability for quality and cost, such as **Accountable Care Organizations (ACOs)** and **Clinically Integrated Networks (CINs)**, with technical assistance, education, and communications for data-sharing, referral coordination, and inter-ACO clinical data exchange.
6. Connecticut must ensure **all stakeholders can securely exchange health information**, through electronic means, with others involved in a patient’s care. This includes providers in behavioral health and long-term post-acute care (LTPAC) settings, as well as community organizations positioned to impact social determinants of health and health equity.

7. Connecticut must **implement workflow tools** that will improve the **efficiency and effectiveness of healthcare delivery**. These include, but are not limited to:
 - the ability to share data **bi-directionally** (report and query) with the **Connecticut Department of Public Health** through the Connecticut Immunization Registry and Tracking System (CIRTS), as well as robust Electronic Laboratory Reporting (ELR) and Syndromic Surveillance systems that accept electronic data submissions and enable providers and hospitals to attest for Meaningful Use;
 - the provision of a **single, integrated clinical encounter alerts service** for all patients admitted or discharged from all acute care facilities and those LTPAC facilities that find clinical and economic value in such a service;
 - the development and implementation of a robust **statewide quality measurement system** to collect **electronic clinical quality measures (eCQM)** and other quality measures, consistent with the recommendations of the eCQM Design Group chartered by the Health IT Advisory Council; and
 - the expanded use of **Direct messaging** in support of transitions of care, coordination of care, and referral coordination.
8. To provide transparent oversight and coordination of State-owned and State-operated health IT assets, the State should charter and implement a **Health IT Steering Committee**, chaired by the HITO, staffed by the HIT PMO, and reporting to the legislative and executive branches, with membership of management-level personnel representing the following agencies:
 - Department of Administrative Services
 - Department of Children and Families
 - Department of Consumer Protection
 - Department of Corrections
 - Judicial Branch - Court Support Services Division
 - Department of Developmental Services
 - Department of Mental Health and Addiction Services
 - Department of Public Health
 - Department of Social Services
 - Office of the Healthcare Advocate
 - Office of the State Comptroller
9. Connecticut should establish, or designate, a **neutral, trusted organization** representing public and private interests to **operate agreed-to statewide health information exchange services**. The organization should adhere to best practices in health information governance, including, but not limited to:
 - Accountability to, and transparency with, stakeholders;
 - Governance by an engaged Board of Directors representing private and public sector leaders with decision-making authority in the organizations that they represent, ensuring that
 - The needs and perspectives of consumers are always represented with a voting position on the Board;

- The Health Information Technology Officer (HITO) provides cohesive representation of State agencies' needs and perspectives through the Health and Human Services IT Steering Committee; and
- Board positions are established to ensure representation of independent provider organizations and of community health service organizations;
- Foundational trust agreements that establish clear "rules of the road," including enforcement authority related to compliance;
- Sound policies and procedures;
- Business decisions driven by value-creation, leading to financial sustainability;
- Judicious use of scarce public and private resources; and
- Effective engagement with the State of Connecticut for public policy and technology integration with State-run systems.

Background and Overview of Methodology

Interoperable HIE technology services, as envisioned by Connecticut Public Act 16-77, states the following:

There shall be established a State-wide Health Information Exchange to empower consumers to make effective health care decisions, promote patient-centered care, improve the quality, safety, and value of health care, reduce waste and duplication of services, support clinical decision-making, keep confidential health information secure and make progress toward the state's public health goals. [Sec. 6, § 17-b-59d (a)]

The Health Information Technology Officer (HITO) is administratively responsible for the planning, design, implementation, and oversight of HIE services that will meet the goals of PA 16-77 and the healthcare needs of the people of the state of Connecticut. To that end, CedarBridge Group was retained to support the HITO with several HIE-related projects including undertaking an environmental scan to assess the current health IT environment, and engage organizations to provide input from across the healthcare ecosystem. The outcomes of this work were designed to support Connecticut's HITO in:

- identifying the health IT and HIE opportunities of greatest stakeholder interest and value;
- defining the optimal approach to enhance and streamline the reporting of electronic clinical quality measures (eCQMs) and other quality measures; and
- planning for an organizational entity appropriate to govern the delivery of HIE services deemed to be highest priority to Connecticut stakeholders.

This *Summary of Findings* provides an overview of the results of a comprehensive environmental scan that was conducted as the first step toward defining the current and desired future state of the exchange of health information in Connecticut.

A comprehensive assessment of stakeholder interests and priorities was essential to the development of the environmental scan. The stakeholder engagement process consisted of seven distinct steps as outlined below in Figure 1.

FIGURE 1 STAKEHOLDER ENGAGEMENT PROCESS



1. Identify Stakeholder Domains

The environmental scan collected input from a broad range of stakeholder domains across public and private sectors; traditional and non-traditional healthcare settings; community organizations providing health support services; and patient and consumer groups.

Domains included in the data collection phase were:

- Consumers
- Hospitals and health systems
- Primary and specialty care providers
- Other healthcare service providers and organizations, including:
 - Behavioral health providers
 - Long-term and post-acute care (LTPAC) providers
 - Radiological services
 - Commercial reference laboratories
 - Pharmacies
- Members of the Connecticut Health IT Advisory Council
- Organizations that have assumed responsibility for quality and cost, including Accountable Care Organizations (ACOs) and Clinically Integrated Networks (CINs)
- Professional and medical associations
- Community organizations, including in the areas of:
 - Homelessness and housing services
 - Addiction services
 - Aging services
 - Services for HIV/AIDS patients
 - Services for victims of trauma
- State agencies
 - Department of Administrative Services
 - Department of Children and Families
 - Department of Consumer Protection
 - Department of Corrections
 - Department of Developmental Services
 - Department of Mental Health and Addiction Services
 - Department of Public Health
 - Office of the Healthcare Advocate
 - Office of the State Comptroller
- Payers, including commercial insurers and employers
- Pharmaceutical and bio-tech interests
- Other stakeholders as needed for completeness of input

2. Identify Stakeholders within Domains

In close collaboration with the HITO, the Connecticut State Innovation Model Program Management Office (SIM PMO), members of the Connecticut Health IT Advisory Council, and other key stakeholders, individuals within the stakeholder domains were identified as **key informants** for the data-gathering process. Through this process, over 100 individuals and organizations were identified as critical stakeholders to be included in the interviews and focus groups conducted during the environmental scan.

Additional key informants were identified during stakeholder engagement, bringing the total number of organizations providing input to 136.

3. Define Topics to be Addressed

Across all stakeholder domains, common focus areas were identified for investigation and analysis, including:

- **Current state** of health IT and HIE;
- **Desired future state** of health IT and HIE functionality and capabilities;
- Current understanding of eQMs and the impact of **clinical quality measurement** on health IT and value-based payment requirements; and
- Areas where support for **technical assistance, education, and training** could be of value to end users of health IT and HIE services.

These areas of investigation were further developed and customized for each stakeholder domain. For example, topics were added for interviews with behavioral health organizations to address specific requirements for sharing data within psychotherapy notes or information regarding substance abuse, defined by the Health Information Portability and Accountability Act (HIPAA) and 42 CFR Part 2, respectively.

4. Establish Mechanisms for Input

A multi-modal approach to data collection was employed, guided by logistics and relevant topics. Stakeholder interviews were determined to be the most effective method for gaining an in-depth understanding of stakeholder needs. Whenever possible, **interviews** were conducted in person, and supplemented by telephonic interviews as circumstances dictated (such as inclement weather or scheduling challenges). Interview guides were developed and customized for each stakeholder domain and background research was conducted for each unique stakeholder interview.

Focus groups were conducted to gather a representative assessment of identified topics for four stakeholder groups: hospitals and health systems (Connecticut Hospital Association), healthcare providers (Connecticut State Medical Society), consumers (SIM Consumer Advisory Board), and the LTPAC community (in collaboration with LeadingAge Connecticut). The format for each focus group was customized by stakeholder domain. A behavioral health focus group was originally planned; after consultation with thought leaders in this domain, an alternative approach of individual interviews with eight behavioral health organizations and associations was implemented.

Additionally, a **survey** of LTPAC stakeholders was designed and distributed with the assistance of LeadingAge Connecticut and the Connecticut Association of Healthcare Facilities. This survey supplemented information gathered through individual interviews and the LTPAC focus group to gather a robust representation of 52 individuals working in this important but often-overlooked stakeholder domain.

5. Review Relevant Background Documents

In addition to stakeholder interviews, focus groups, and the LTPAC survey, the environmental scan process included a comprehensive **review of background and reference documents**. The documents covered a variety of topics of relevance to health IT and HIE, both in Connecticut and nationally, and provided important context for the stakeholder engagement process. The literature also provided context and support for the conclusions and recommendations in this report. Examples of reviewed documents include, but are not limited to, the following:

- SIM Operations Plan and other SIM documentation
- The State Medicaid Health IT Plan (SMHP)
- Connecticut's Implementation Advanced Planning Document (IAPD) for Health IT and HIE
- Various reports and documents from the Connecticut Department of Public Health, including *Healthy Connecticut 2020*
- Annual reports of community organizations
- Past documentation from the Health IT Exchange of Connecticut (HITE-CT)
- Descriptions of national interoperability initiatives such as eHealth Exchange, Carequality, CommonWell, and Surescripts
- Office of the National Coordinator's (ONC's) Nationwide Interoperability Roadmap
- Request for Proposals (RFPs) from Rhode Island and Oregon for eCQM Systems
- Various documentation on state HIE organizations, HIE vendors, and HIE governance models

6. Gather Input

The above stakeholder engagement and data collection methodology was initiated on January 11, 2017 and continued through April 6, 2017. Connecticut's HITO, Allan Hackney, provided overall direction of the engagement process, with CedarBridge Group subject matter experts Carol Robinson (Principal) and Michael Matthews (Senior Engagement Director) serving as project leads throughout the process, aided by four analysts and one project manager. The CedarBridge team was augmented by UConn Health's Center for Quantitative Medicine, and significant support was provided by the SIM PMO, including assistance in communications, scheduling, and review of interview guides, focus groups, and survey design.

In addition to a targeted online survey returning 52 responses from LTPAC providers, CedarBridge hosted four focus groups and interviewed 68 organizations, for a total of 282 individual stakeholders providing input. Interviews ranged in length from 30 to 120 minutes, depending on the number of participants. In total, 136 organizations provided input in the process through one or more of the input mechanisms, as detailed in Appendix B (Stakeholder Organizations and Engagement Type).

7. Analyze Stakeholder Input

Interview summaries were created following each interview and delivered to the HITO and SIM PMO. Each summary included the following criteria:

- Description of stakeholder

- Current state of health IT and HIE capabilities
- Organizational priorities
- Desired future state of health IT and HIE
- Key takeaways

Summary of Findings

In the Summary of Findings, focus is placed on cross-domain findings and common themes that emerged during the environmental scan process across the following categories: the experience and views of **patients and consumers**; the market **environment** experienced by healthcare organizations; the current usage and future needs for health IT **tools** by stakeholders; and stakeholder views on **governance** of health IT investments in Connecticut. The consistent themes that cut across the domains and the recommended considerations for future planning follow the Summary of Findings.



Patients and Consumers

Stakeholders view improvement of **patient care and consumer engagement** in better health as the core reasons for data-sharing and data access. These priorities are consistent with the patient-centric focus and priorities in PA 16-77 and have become increasingly important as the State embraces whole-person care and consumer engagement as foundational elements for the transition to value-based care. Stakeholders view **privacy, security, and confidentiality** of health information as critical considerations for any systems implemented by the State.

Stakeholders also emphasized the importance of **health equity** and support for vulnerable populations. These concerns were also referenced with respect to **social determinants of health**. Most frequently cited areas of need (outside the medical and healthcare sector) were nutrition, housing, and transportation.

The ability for patients and consumers to **easily access clinical data** is an issue of concern to stakeholders. Most health systems and some providers have **patient-facing portals** that enable a patient to view clinical data from the electronic health record (EHR), such as medications and lab values. Patients generally cannot view their clinical data across multiple healthcare providers in a single, consolidated view.

Many stakeholders recognize that **consumer-generated data** is of growing importance. This can take the form of **consumer-defined outcome measures**, but often relates to data from **devices**. Devices may be **home-based monitors** (such as blood pressure monitors and smart scales), **implantable devices** (such as pacemakers), or **wearable devices** (such as a Fitbit or similar product with a heart rate monitor). There is a rapidly expanding marketplace for such technology. Future opportunities for integrating patient-generated data into EHRs and enterprise data warehouses should be closely monitored.

Patients and Consumers

- “North Star”
- Engagement
- Whole-Person
- Devices
- Data Access
- Tools
- Vulnerable Populations
- Health Equity



Environment

Ongoing **health challenges** experienced by many citizens of Connecticut were discussed in multiple interviews. Stakeholders called attention to an aging population base, and wide gaps in income and socioeconomic status of various regions of the state. This is consistent with the report of the Connecticut Department of Public Health, *Healthy Connecticut 2020: Part 1: State Health Assessment*.¹ The report identified health improvement opportunities in seven areas:

1. Maternal, Infant, and Child Health
2. Environmental Risk Factors and Health
3. Chronic Disease Prevention and Control
4. Infectious Disease Prevention and Control
5. Injury and Violence Prevention
6. Mental, Alcohol, and Substance Abuse
7. Health Systems, including coverage and access

Interviewees from community organizations shared many examples of their work to redress these ongoing health challenges. These included a diversity of services such as telehealth support for trauma victims from Cambodia; housing support services for wounded warriors; information and referral services; and services for individuals with opioid addictions.

The State is actively transitioning from a predominantly fee-for-service healthcare system to a **fee-for-value healthcare system**. Many stakeholders participate in ACOs and in other transformation initiatives designed by the Centers for Medicare & Medicaid Services (CMS) and the Center for Medicare and Medicaid Innovation (CMMI). The State is leveraging its role as the leading employer in Connecticut by promoting consumer engagement and aligning payer incentives for cost and quality. Other notable programs that encourage principles of coordinated and/or value-based care include:

- Medicare Shared Savings Program (MSSP)
- Patient Centered Medical Home Plus program (PCMH+)
- Community and Clinical Integration program (CCIP)
- Advanced Medical Home program (AMH)

Commercial payers are also critical to the transition to value-based care in Connecticut and have each taken significant strides to that end. Most major health plans are sharing **analytics tools** with providers (utilizing claims data), with the intent to identify patients at risk for poor outcomes and/or high utilization costs. **Incentives** are beginning to be incorporated into provider contracts to reward efficiency and quality. A variety of mechanisms are used by payers for accessing clinical data from providers and health systems; these include data provided to support utilization management and pre-authorization. Payers are currently receiving lab results through electronic means from their contracted commercial labs, but all

Environment

- Value-based Care
- ACO / CIN
- Population Health
- Social Determinants
- Community Orgs
- Current Assets (National)
- Current Assets (State)
- Quadruple Aim

¹ http://www.ct.gov/dph/lib/dph/state_health_planning/sha-ship/hct2020/hct2020_state_hlth_assmt_032514.pdf

health plans interviewed for the environmental scan recognize the value of **receiving electronic lab data from all lab settings**.

While approaches to provider engagement differ by payer, most payers agree on the value of **sharing clinical data**, as well as assessing performance based on clinical data. Payers also express a willingness to share their claims data with providers if providers have the technical and operational capabilities to use such data effectively. Payers generally see value in the emergence of organized delivery systems, such as ACOs and CINs, although there is variability in structure and capabilities across these systems. Payers spoke to the **critical importance of data security and data provenance** as claims and clinical data are shared between providers and payers.

Value-based care initiatives increase the demand on providers not only to understand the needs of their patients at an individual level, but also across the **entire patient population**. Several providers noted the deficiencies in their EHR system's current capabilities for clinical decision support. They described functionality that could create improvements, such as a prompt if a diabetic patient is due for a Hemoglobin A1c lab test.

There is a growing recognition in the state that **social determinants of health** need to be addressed as part of the transition to value-based care. As provider entities increasingly take on clinical and financial risk for improved outcomes and cost, these organizations are incentivized to look to other patient and consumer support systems that can be coordinated and integrated as part of an overall care plan. Input from **community-based organizations** during the stakeholder engagement indicated a high degree of interest in new or expanded partnerships with the medical and healthcare delivery system. Several community-based organizations stated they do not know how to engage in meaningful partnerships with healthcare providers, referencing the need for better coordination and communication processes, as well as enhanced technology integration. Solutions should focus on overall coordination of care and the sharing of care coordination plans, with technical assistance and education/communication support for building community partnership hubs.

In addition, there is widespread support for adding a fourth aim – **improved clinician experience** – to the Triple Aim defined by the Institute for Healthcare Improvement (IHI) as patient experience, per capita cost, and population health.² This adaptation is referred to as the **Quadruple Aim** across the state and in other parts of the country.



Tools

Health IT **tools currently deployed or planned by private sector entities** was a common topic raised during stakeholder interviews.

One stakeholder shared, “We’ve had to make do without a state HIE. Our needs today are different than they were three to five years ago.” This section highlights several tools that are currently in use by some providers and

Tools

- Public Health Reporting
- Encounter Alerts
- Referral Management
- Connecticut Prescription Monitoring and Reporting System Integration
- Analytics
- Electronic Clinical Quality Measurement
- Advanced Directives Registry
- Direct Messaging

² <http://www.ihl.org/Engage/Initiatives/TripleAim/Pages/MeasuresResults.aspx>

organizations, and other tools identified by stakeholders as desirable for improving coordinated care delivery, measuring quality, and enabling value-based payment models in the future.

Electronic Health Record (EHR) Systems

Health systems have had success in the **adoption of EHRs** for their hospitals and employed physicians. Providers have also adopted EHRs, but the vendor platforms for providers are much more diverse than those adopted by health systems. LTPAC providers, as reported by a survey conducted as part of the Environmental Scan, have achieved an adoption rate over 80%. Meaningful Use (MU) funds to support EHR adoption were not available for behavioral health providers, yet there are notable examples in the state of adoption by this stakeholder group to improve quality and better understand outcomes and performance.

Regardless of stakeholder domain, EHR users stated a **preference for working within their EHR environment** whenever possible. They spoke to the inefficiency of having to log into a different portal to obtain needed data. Most EHRs have an integrated Direct messaging utility. Health system EHR vendors have some capacity for **interoperability with eHealth Exchange**⁴, enabling data exchange with federal agencies such as the US Department of Veterans Affairs (VA) and the Social Security Administration (SSA), though only one hospital in Connecticut is currently an eHealth Exchange Participant. Ambulatory providers across the country have far less participation in eHealth Exchange.

Trust is widely viewed as foundational to any initiative in interoperability and HIE. Principles of trust have been established at a national level and the **21st Century Cures Act** calls for a continued federal role in the promotion and regulation of interoperability. There is a specific call for public/private collaboration to establish a “**trusted exchange framework**, including a common agreement among health information networks nationally.”³ In addition to embracing principles of trust and appropriate trust agreements, successful health information organizations employ best practices in conducting their governance responsibilities. These practices include transparency, representation of stakeholders on the governing body, and accountability to those whom they represent.

Data Exchange Tools

National interoperability initiatives were observed by interviewees as delivering some measure of current value and representing strong potential for future value. Specifically, CommonWell and Carequality are notable. Carequality provides a national, consensus-built interoperability framework to enable exchange between and among health data-sharing networks. CommonWell is a non-profit trade association of health IT companies working together to create universal access to health data nationwide. CommonWell and CareQuality both support query-based information exchange and signed an agreement in December 2016 for CommonWell to become a Carequality implementer. This development has enormous potential to rapidly scale connectivity across the country, particularly for ambulatory care providers.

Most providers and health systems, and many behavioral health and LTPAC providers, have **Direct secure messaging capabilities** for HIPAA-compliant communication with other provider entities. However, these

³ <https://www.healthit.gov/sites/default/files/trustframeworkfinal.pdf>

capabilities could be characterized as sub-optimal due to two factors. First, there is a **lack of a common directory of Direct electronic addresses** that would enable one provider entity to find the Direct address of another provider entity with whom to communicate. This need could be addressed through a state-level initiative to create a directory of Direct addresses. There is also a **lack of standardization and training** in how Direct messaging could be integrated into organizations' workflows to support activities such as referral coordination.

There is an opportunity for Connecticut healthcare organizations to **collaborate on the preferred content of shared clinical data** with other providers during the consultation and referral processes, and work with EHR vendors as consortia to improve the functionality of Direct messaging within EHR systems. Direct messaging can also provide an **enhanced secure communication tool to clinical and community-based organizations without an EHR system** through internet-based services.

Encounter alerts was a topic of optimism and concern for stakeholders. There are two primary encounter alert platforms in use today: PatientPing (offered in partnership with the Connecticut Hospital Association), and Project Notify (provided by DSS for only Medicaid providers). Three concerns related to encounter alerts were frequently expressed. First, there should be a seamless and efficient way to gain access to **more robust clinical data** related to an encounter once a provider has been alerted. Second, while encounter alerts are generally viewed as positive, **multiple encounter-alerting platforms will be burdensome** to both health systems and providers. Third, **cost of receiving encounter alerts** will be a barrier to implementation for all patients.

Medication-related Tools

e-Prescribing is widely recognized as one of the more successful examples of HIE in the state, largely driven by the success of Surescripts in creating a gateway connecting pharmacies and prescribers. Most providers have e-prescribing functionality built into their EHR systems. This functionality enables the prescriber to check **medication history** through seamless access to medication data in retail pharmacy and Pharmacy Benefit Manager (PBM) databases. Because medication history can usually be consumed as structured, discrete data into the provider's EHR, **clinical decision support** (such as drug-drug and drug-allergy alerts) is enabled.

Opioids are widely cited as a significant public health issue in Connecticut. The **Connecticut Prescription Monitoring and Reporting System (CPMRS)** allows providers to access controlled prescription data both within and outside the state. This generally occurs through a **portal provided by Appriss**, the vendor contracted by the State to operate the technology for the CPMRS. Providers view the **CPMRS data as valuable** and essential to meet the State's requirements for prescribed opioids and related drugs. However, the use of a **separate portal is not ideal from a clinical workflow standpoint**, and often results in lower utilization and adoption by providers. Two organizations are piloting interfaces with the CPMRS that enable single sign-on (SSO) for a user within their own EHR, and initial impressions of this interface functionality are positive. The **possibility of Surescripts enabling the CPMRS database** to allow prescribers to access controlled medication histories within the e-prescribing workflow (like PBMs and retail pharmacy medications) is also a current discussion. This potential approach is viewed positively, although one provider stated that the need for opioid data often comes during patient evaluation before the actual

prescribing process. The **Veterans Administration Connecticut Healthcare System** made special note of the importance of access to opioid prescription data for their patient population.

Analytic Tools

Increasingly, **providers have implemented analytics tools** to better understand patient outcomes, gaps in care, and other population health measures. Often, these tools are obtained through the provider's EHR vendor, such as Epic's Healthy Planet module, Cerner's Cloudera enterprise data hub, or athenahealth's Population Health knowledge hub. However, many providers also describe an approach of using an external data warehouse with population-level analytics tools populated with clinical and billing data. In some cases, these tools are used to support data reporting.

Reporting requirements is a topic of great interest for stakeholders. Without exception, there is support for **simplifying the report of electronic clinical quality measures (eCQMs)**. In the current state, providers report in a variety of formats, and the measures themselves (even for the same health condition or disease) sometimes vary by the entity requiring the data. The concept of **extract once, report to many** was endorsed by interviewees, with the desired future state being a **statewide quality measurement system** that reduces the burden of reporting to numerous quality programs and/or multiple value-based contracts. Stakeholders also see long-term value in considering **quality measures based on varied sources of data**, such as educational systems, the Connecticut corrections system, environmental and public health systems, community-based organizations, and patient-generated data, in addition to claims and clinical data from EHRs.

Identity Management Tools

Several of the large health systems and health plans acknowledge the onerous efforts needed to maintain **accurate provider directories**. Many stakeholders expressed enthusiasm for a **statewide healthcare directory** that can serve as **an authoritative source of truth** for demographic and other identifying information on providers and organizations providing healthcare and health support services in Connecticut, although interviewees recognize that there will likely be a need for regulatory or contractual requirements to ensure data is updated on a timely basis. Interviewees expressed concern regarding **missing data** due to Medicaid eligibility status changes, commercial health plan annual changes, and out-of-network utilization. Linking a statewide healthcare directory and a statewide master person index, through methods of **attribution between providers and their patients**, is recognized by many organizations as having high value for addressing key business needs.



Governance

While governance of HIE services was not a common theme among stakeholder interviews, there were a number of topics discussed that serve to inform governance considerations and decisions.

Trust is widely viewed as foundational to any initiative in interoperability and health information exchange. There is a prevalent **sense of frustration** among stakeholders regarding the State's previous efforts to implement HIE services

Governance

- Trust
- Confidence
- Value
- Scarce Resources
- Decision Criteria
- Stakeholder Engagement
- Emerging Opportunities

and an apparent lack of coordination across state agencies with respect to their health IT assets. Some stakeholders cited current and past efforts by the State as a source of confusion, including the proposed eCQM engine for Medicaid (Zato Health), and the alert notification system specific only to Medicaid beneficiaries (Project Notify). Stakeholders cited a **lack of clear and timely information** about these two initiatives

Similarly, providers and hospitals in Connecticut are not satisfied with public health reporting and this was routinely ranked as a high priority and necessary improvement for the State. Many interviewees expressed concern about the insufficient functionality of the Department of Public Health (DPH) technology applications, particularly about the Connecticut Immunization Registry and Tracking System (CIRTS). It was reported that the Centers for Disease Control (CDC) sent DPH a gap analysis that the CIRTS registry was not meeting standards required to support bi-directional exchange, and that the American Immunization Registry Association (AIRA) has also issued questions to DPH about the gaps in CIRTS functionality.

Stakeholder interviews included many **state agencies** with numerous top-ranking management as well as program staff members, providing input on the State's current health IT systems. These systems included eligibility determination for various programs and payment systems lacking infrastructure to provide client services to the people of Connecticut. Alignment, transparency of efforts, and improved coordination between state agencies for deployment of healthcare technology systems were cited as opportunities for improvement.

Stakeholders' **confidence in the State's** ability to successfully implement HIE services is low across all sectors. Some stakeholders recommended that **early wins** would be helpful in restoring confidence. Many **commended the stakeholder engagement** as an effective means for strategy development and expressed **encouragement for the leadership shown by the HITO**.

Across all domains, stakeholders spoke to **scarce resources**. Expressed in various ways, most reported they do not have time, money, staff, or energy to participate in a State-sponsored HIE unless there are tangible benefits greater than the accompanying costs. Many address this by speaking of **value creation**. This might take a number of forms, such as workflow efficiency, enhanced clinical decision-making, or realization of performance incentives.

Themes and Considerations

The following themes and considerations represent the distillation of input from stakeholders, documentation reviewed throughout the environmental scan, and the subject matter expertise of CedarBridge Group.

1. The Patient is the North Star

Consistent with the priority and focus of PA 16-77, one stakeholder coined the phrase, “the patient is the North Star.” The interests of **patients and consumers** must always be considered foremost and provide a guiding compass in any decisions related to health IT and HIE. Specific areas of importance include:

- **Privacy, security, and confidentiality;**
- **Consumer engagement** and tools for better management of one’s health and healthcare in partnership with the care team;
- Patient **access to integrated clinical data**, versus patient portals tethered to a single EHR; and
- **Quality and price transparency.**

2. “Skate to where the puck is going to be, not where it has been.” (Wayne Gretzky)

Significant effort has gone into query-based exchange initiatives over the past decade, with over \$550 million in federal funds invested in state-level HIE through the ONC. While Connecticut has previously struggled to successfully launch statewide HIE services, it is also true that most existing statewide HIEs across the nation are not yet operating as self-sustaining technology service providers. Many astute observers would conclude that efforts to establish robust query-based HIEs have not been realized.

On the national level, **eHealth Exchange** boasts participants representing over 65% of all hospitals in the US, and while the network provides connectivity to the US Department of Veterans Affairs, Department of Defense, and Social Security Administration health records systems, the utilization of the network, outside of these government-related use cases, has been slow to materialize. However, promise is offered in vendor-backed interoperability initiatives such as **CommonWell and Carequality**. In addition, there is an increasing use of application program interfaces (APIs) that support integration and interoperability.

These considerations lead to the recommendation that there is no compelling reason for Connecticut to spend its scarce resources on a mechanism for basic query-based exchange because credible organizations offer services that are already in use in the state that can be leveraged.

Strong consideration should be given to the creation of robust **identity management services**. These include a **statewide healthcare directory** that can become a reliable source of truth for demographic and other identifying information on healthcare providers and organizations, as well as key providers of community support services. The directory should be linked to a **statewide master person index (MPI)** and **attribution services** with capabilities to map care relationships between providers and patients/consumers.

Similarly, any system or service implemented by the State will need capabilities for **data stewardship and data normalization**. These capabilities, in addition to others such as protecting the **security and privacy** of protected health information (PHI), must be considered **table stakes** that will be required of any system

or service operated by, or on behalf of, the State. These table stakes will, in part, be codified through data use agreements, defining terms and conditions for data exchange in the state.

The various initiatives and capabilities will ultimately result in a **network of networks** approach to interoperability in the state. Individual interoperability initiatives will continue to support the business needs of their respective constituencies. Even with unique HIE offerings like Epic's CareEverywhere, or broader HIE efforts like the Connecticut State Medical Society (CSMS) tool hosted by Kansas Medical Mutual Insurance Company (KaMMCO), stakeholders agree additional benefits can be derived by the provision of shared identity services. Ultimately, **interoperability across these individual initiatives** will create synergy and value beyond what any one initiative could achieve on its own. Certain **rules of the road** should ensure that policies and procedures are followed, to ensure **privacy and security** of data exchange and that standards are adopted and implemented on a consistent basis by entities engaged in interoperability in the state. These rules could take the form of qualifying criteria for organizations desiring to participating in HIE and interoperability in the state, and for those who will want to utilize the core technology of identity management and other services offered by the State.

3. No stakeholder left behind

There is widespread recognition that **whole-person care** requires an expanded notion of who is on the healthcare team. Many stakeholders, including **behavioral health providers, LTPAC providers, and community-based organizations can contribute to a more value-driven healthcare system**, but specific actions must be taken to redesign current processes of care and communications for that contribution to occur. Connecticut should implement **methods to support care coordination, including the ability to securely share care coordination plans** across all those participating in the support and care of patients/consumers.

4. Workflow, workflow, workflow

Across the healthcare landscape, providers are under intense and growing pressure to increase the efficiency and effectiveness of care delivery. At the same time, support is growing to add a fourth component to the Triple Aim (as defined by the IHI) of population health, experience of care, and per capita cost. That goal is to **improve the work life of healthcare providers**, including clinicians and staff. Providing a suite of integrated and effective workflow tools will contribute immeasurably to this goal. Of primary consideration should be the following:

- **eQMs:** Connecticut should establish a standardized approach to reporting eQMs in support of value-based care, which would benefit from better harmonization of payers around a core set of measures.
- **CPMRS:** Connecticut should further integrate this important database into the e-prescribing workflow of providers.
- **Public Health Reporting:** Connecticut should establish the means for efficient electronic reporting of immunizations, labs, and syndromic data to the Connecticut Department of Public Health, while enabling CIRTSS to communicate bi-directionally with providers.
- **Direct Messaging:** Connecticut should expand the use of Direct messaging capabilities by: (1) creating a healthcare directory that would include Direct addresses as part of its functionality;

(2) standardizing use of Direct messaging to support referral coordination; and (3) promoting the use of Direct messaging for those providers and community organizations that do not have certified EHRs.

5. “Give me a lever long enough and a fulcrum on which to place it, and I shall move the world.” (Archimedes)

Transforming healthcare from fee-for-service to value-based care is an enormous challenge, yet Connecticut already has important **levers in place in the form of ACOs and CINs**. These initiatives are designed to align incentives for meeting Triple Aim objectives. **ACOs and CINs also provide important value in health IT and HIE design**. HIE is never an end unto itself, but rather a means to an end. Concepts of data-sharing and interoperability within an accountable care context can create more tangible value propositions for the stakeholders involved. Connecticut must identify specific strategies for **data-sharing (as needed) within ACOs, as well as data-sharing across ACOs**. Harnessing market forces that are enabled or enhanced by HIE and interoperability will increase the likelihood of sustainability for whatever services the State chooses to implement.

6. “The future ain’t what it used to be.” (Yogi Berra)

Two areas have potential for **future value-creation** for Connecticut. The first is **genomics and precision medicine**. Certain **foundations are already in place**, such as academic medical centers, labs, and technology incubators. Precision medicine is already impacting certain areas of clinical decision-making, and those areas will only grow in the future. Nonetheless, it is uncertain how genomic data will be shared across provider entities and how such data will be integrated into EHRs and clinical decision support tools. Connecticut should consider the **opportunity for national leadership and economic development** in this arena.

In addition, **bring your own device (BYOD)** is still an emerging concept, whether in the form of home-monitoring, wearable devices, or implantable devices. How devices are deployed in the state and how data from those devices are integrated into EHRs and other data systems remains to be determined. This is recommended as an **area of future study** for the State.

Recommendations

The following recommendations are the distillation of input from stakeholders, documentation acquired through the environmental scan, and the subject matter expertise of CedarBridge Group. These recommendations are intended to provide a foundation for future strategy, policy, and program development.

1. Connecticut must keep patients and consumers as a primary focus in all efforts to improve health IT or HIE, including addressing health equity and the social determinants of health.

2. Connecticut must leverage, not duplicate, existing interoperability initiatives; and provide technical assistance, education, and coordinated communication to all stakeholders using health IT and HIE services.

3. Connecticut must establish “rules of the road” to provide an appropriate governance framework.

4. Connecticut must implement core technology that complements and interoperates with systems currently in use by private sector organizations.

5. Connecticut must support provider organizations and networks that have assumed accountability for quality and cost.

6. Connecticut must ensure that basic mechanisms are in place for all stakeholders to securely communicate health information with others involved in a patient’s care and treatment.

7. Connecticut must implement workflow tools that will improve the efficiency and effectiveness of healthcare delivery.

8. State agencies must charter and implement a Health IT Steering Committee, chaired by the HITO, staffed by the HIT PMO, and reporting to the legislative and executive branches.

9. Connecticut should establish or designate a neutral, trusted organization, representing public and private interests, to operate agreed-to statewide HIE services.

In conclusion, Connecticut has a unique opportunity to leverage health IT and HIE in support of its journey to value-based care. Stakeholders have made many advancements in health IT, however collaborative effort is still needed to advance technical standards and process re-design in the state. Stakeholder engagement efforts can begin to lay the foundation for the State and all its stakeholders to be successful in the important work that lies ahead.

Appendix A: Glossary

Term	Definition
42 CFR Part 2	42 CFR Part 2 is a federal regulation that applies to all records relating to the identity, diagnosis, prognosis, or treatment of any patient in a substance abuse program that is conducted, regulated, or directly or indirectly assisted by any federal department or agency, and establishes how consent for those records must be managed.
ACO	Accountable Care Organization. An ACO is a healthcare organization characterized by a payment and care delivery model that seeks to tie provider reimbursements to quality metrics and reductions in the total cost of care for an assigned population of patients.
AMH	Advanced Medical Home. The AMH program is an initiative being implemented through the Connecticut SIM PMO. This program assists primary care practices within Advanced Networks to become patient-centered medical homes.
CareQuality	CareQuality is a national public-private collaborative that facilitates agreement among diverse stakeholders to develop and maintain a common interoperability framework enabling exchange between and among data-sharing networks. CareQuality is coordinated by The Sequoia Project.
CCIP	Community and Clinical Integration Program. CCIP is an initiative developed as part of the Connecticut State Initiative Model to provide a set of care delivery standards and technical assistance intended to enable Advanced Networks and Federally Qualified Health Centers to deliver care that results in better health outcomes at lower costs for Medicare, Medicaid, and commercial plan enrollees.
CINs	Clinically Integrated Networks. As healthcare systems transition to value-based care, they might reorganize into a clinically integrated network to allow for employed and affiliated providers to jointly negotiate with payers. Development of this kind of network means developing a team of primary care and specialty physicians to actively participate in a streamlined care delivery model.
CommonWell	CommonWell is a non-profit trade association of EHR vendors working to achieve cross-vendor interoperability that assures provider access to personal health information.
Community-based Organizations	Organizations or institutions who are not traditional healthcare providers but whose work intersects with the healthcare system.
CMS	Centers for Medicare and Medicaid Services. CMS is the federal agency within the US Department of Health and Human Services (HHS) that administers the Medicare program and works in partnership with state

Term	Definition
	governments to administer Medicaid, the Children’s Health Insurance Program (CHIP), and health insurance portability standards.
CPMRS	Connecticut Prescription Monitoring and Reporting System. The CPMRS is a state-run electronic database used to track the prescribing and dispensing of controlled prescription drugs to patients.
Direct Messaging	Direct messaging is a secure, encrypted web-based communication system for physicians, nurse practitioners, physician assistants, and other authorized users to share protected health information.
eCQM	Electronic Clinical Quality Measures. eCQMs are tools that help measure and track the quality of health care services provided by providers within the healthcare system. To report CQMs electronically from a her, electronic specifications must be developed for each CQM. The specifications can be captured or stored in the EHR so that the data can be sent or shared electronically.
eHealth Exchange	The eHealth Exchange, formerly the Nationwide Health Information Network Exchange, is a community of exchange partners (including federal agencies, private healthcare organizations, and HIEs), that share information under a common trust framework and a common set of rules. The Sequoia Project is the non-profit organization under which the eHealth Exchange operates.
EHR	Electronic Health Record. An EHR is an electronic version of a patient’s medical history, maintained by a provider over time, which usually includes key clinical data relevant to that person’s care under a particular provider, including demographics, progress notes, problems, medications, vital signs, past medical history, immunizations, laboratory data, and radiology reports.
Encounter Alerts	An encounter alert is a notification sent to an attributed provider that a patient has been admitted, discharged, or transferred from a hospital.
e-Prescribing	e-Prescribing is a provider’s ability to electronically send a prescription directly to a pharmacy from the point of care.
Health Equity	Health equity is the attainment of the highest level of health for all people. Achieving health equity requires valuing individuals equally with focused and ongoing societal efforts to address avoidable inequalities, historical and contemporary injustices, and the elimination of health and health care disparities. ⁴

⁴ U.S. Department of Health and Human Services, Office of Minority Health. (2011, April). National Stakeholder Strategy for Achieving Health Equity. doi: https://minorityhealth.hhs.gov/npa/files/Plans/Toolkit/NPA_Toolkit.pdf

Term	Definition
HIE	Health Information Exchange. The term "HIE" can be used as a verb (the electronic exchange of health-related data) or as a noun (organizations dedicated to the secure exchange of health-related data). HIE organizations (or groups of organizations) are responsible for coordinating the exchange of protected health information in a region, state, or the nation. HIEs are also known as Health Information Organizations (HIOs).
HIPAA	Health Information Portability and Accountability Act. The HIPAA Privacy Rule establishes national standards to protect individuals' medical records and other personal health information and applies to health plans, healthcare clearinghouses, and healthcare providers that conduct certain healthcare transactions electronically. The Rule requires appropriate safeguards to protect the privacy of personal health information, and sets limits and conditions on the uses and disclosures that may be made of such information without patient authorization. The Rule also gives patients certain rights over their health information, including rights to examine and obtain a copy of their health records and to request corrections.
Health Information Technology Advisory Council	The Connecticut Health Information Technology Advisory Council provide counsel and input to the HITO. The Council's membership and responsibilities were established through PA 16-77.
HITO	Health Information Technology Officer. With PA 16-77, the position of the HITO was established and charged with the following: (1) Overseeing the development and implementation of the Statewide Health Information Exchange; (2) coordinating the state's health IT and HIE efforts to ensure consistent and collaborative cross-agency planning and implementation; and (3) serving as the state liaison to, and working collaboratively with, the statewide HIE, to ensure consistency between the statewide health IT plan and the statewide HIE and to support the state's health IT and HIE goals; within existing resources and in consultation with the State Health IT Advisory Council.
Interoperability	Interoperability refers to the ability for systems to exchange data and operate in a coordinated, seamless manner.
KaMMCO	Kansas Medical Mutual Insurance Company. KaMMCO is a medical professional liability insurance company providing liability insurance for physicians and other health care professionals, medical groups, hospitals, and professional associations.
LTPAC	Long-Term Post-Acute Care. Long-term and post-acute care settings include inpatient rehabilitation facilities, assisted living facilities,

Term	Definition
	skilled nursing facilities, nursing homes, and home health agencies, among others who provide care services to patients for an extended period.
MPI	Master Patient Index. MPIs store, and cross-reference, unique patient identification for every patient in an HIE or health system.
MSSP	Medicare Shared Savings Program. The MSSP was established by the Affordable Care Act to facilitate coordination and cooperation among providers to improve the quality of care for Medicare Fee-For-Service (FFS) beneficiaries and reduce unnecessary costs. Eligible providers, hospitals, and suppliers participate in the MSSP by creating or participating in an ACO.
PBM	Pharmacy Benefit Manager. A PBM is a third-party administrator of a prescription drug program. PBMs are primarily responsible for developing and maintaining formularies, contracting with pharmacies, negotiating discounts and rebates with drug manufacturers, and processing and paying prescription drug claims.
PCMH+	Patient-Centered Medical Home Plus. PCMH+ is a national, advanced primary care medical home model that aims to strengthen primary care through regionally-based, multi-payer payment reform and care delivery transformation. The program was launched by the Center for Medicare and Medicaid Innovation (CMMI), a division of CMS, in March of 2016.
PHI	Protected Health Information. PHI refers to all individually identifiable health information held or transmitted by a covered entity or its business associate, in any form or media, whether electronic, paper, or oral. PHI is protected by the requirements of the HIPAA Privacy Rule.
Provider Directory	A provider directory is a listing of healthcare providers or organizations in a directory format.
Query-based exchange	Query-based exchange is the ability for providers to search for and/or request a patient’s health information from another provider.
SIM PMO	Connecticut State Innovation Model Program Management Office. The SIM PMO was established in January 2014 to manage the implementation of the Connecticut Healthcare Innovation Plan. The SIM PMO works collaboratively with consumers, advocates, providers, employers, health plans, and state agencies to achieve their vision to <i>establish a whole-person-centered healthcare system that improves community health and eliminates health inequities; ensures superior access, quality, and care experience; empowers individuals to actively participate in their health and healthcare; and improves affordability by reducing healthcare costs.</i>

Term	Definition
Social Determinants of Health	Social determinants of health are factors in the environments in which individuals are born, live, learn, work, play, worship, and age that affect a wide range of health, function, and quality-of-life outcomes and risks. Examples of social determinants include socioeconomic conditions; access to educational, economic, and job opportunities; public safety; and access to healthcare services.
SSA	Social Security Administration. The SSA is an independent agency of the US government that administers a social insurance program consisting of retirement, disability, and survivors' benefit. The SSA is the largest social welfare program in the US.
Whole-Person Care	Whole-person care is the coordination of health, behavioral health, and social services centered around a patient with the goal of improved health outcomes and more efficient and effective use of resources.
VA	US Department of Veterans Affairs. The VA is responsible for providing services to US veterans. The VA provides healthcare services and benefits programs to former military personnel and their dependents.

Appendix B: Stakeholder Organizations and Engagement Type

Stakeholder Organization	Engagement Type
1. Access Health Connecticut	Interview
2. Aetna	Interview
3. Anthem	Interview
4. Apple Rehab	Interview, Survey
5. Avalon Health Center at Stoneridge	Survey
6. Avon Health Center	Survey
7. Beacon Brook Health Center	Survey
8. Beechwood	Survey
9. Bishop Wicke Health Center	Survey
10. Bradley Home, The	Survey
11. Bristol Hospital	Focus Group
12. Caleb Hitchcock Health Center	Survey
13. Cardiology Associates of New Haven	Focus Group
14. Cigna	Interview
15. Clifford Beers Clinic	Interview
16. Coalition to End Homelessness	Interview
17. Community Health Center Association of Connecticut (CHCACT)	Interview
18. Community Health Center, Inc.	Interview
19. Community Health Resources	Interview
20. Community Medical Group	Interview
21. Community Mental Health Affiliates, Inc.	Interview
22. ConnectiCare	Interview
23. Connecticut Academy of Family Physicians	Interview
24. Connecticut Association for Healthcare at Home	Interview
25. Connecticut Association of Health Care Facilities, Inc.	Interview
26. Connecticut Chapter of the American Academy of Pediatrics	Interview
27. Connecticut Children's Medical Center	Focus Group, Interview
28. Connecticut Coalition of Taft-Hartley Health Funds	Interview
29. Connecticut Health Data Collaborative	Interview
30. Connecticut Hospital Association	Focus Group
31. Connecticut Institute for Primary Care Innovation	Interview
32. Connecticut Medical Group, LLC	Focus Group
33. Connecticut Orthopaedic Society	Interview
34. Connecticut Psychiatric Association	Interview
35. Connecticut Psychological Association	Interview
36. Connecticut State Medical Society	Focus Group, Interview
37. Connecticut United Way	Interview
38. Covenant Village of Cromwell	Survey

	Stakeholder Organization	Engagement Type
39.	Crestfield Rehabilitation Center and Fenwood Manor	Survey
40.	CVS	Interview
41.	Day Kimball Hospital	Focus Group
42.	Department of Administrative Services	Interview
43.	Department of Children and Families	Interview
44.	Department of Consumer Protection	Interview
45.	Department of Corrections	Interview
46.	Department of Developmental Services	Interview
47.	Department of Mental Health and Addiction Services	Interview
48.	Department of Public Health (Immunization/Syndromic/ELR Staff)	Interview
49.	Department of Public Health (Population Health Staff)	Interview
50.	Dermatology Surgical Associates, LLC	Focus Group
51.	Elim Park	Focus Group, Survey
52.	Eye Care Group, The	Focus Group
53.	Fair Haven Community Health Center	Interview
54.	Filosa Convalescent Home	Survey
55.	Genesis Healthcare	Survey
56.	Glendale Center	Survey
57.	Griffin Health System	Focus Group, Interview
58.	Hamden Rehabilitation and Health Care Center	Survey
59.	Hartford Healthcare	Focus Group, Interview
60.	Hartford HealthCare Senior Services	Survey
61.	Harvard Pilgrim	Interview
62.	Health IT Advisory Council Member David Fusco	Interview
63.	Hughes Health and Rehabilitation, Inc.	Survey
64.	iCare	Survey
65.	Ingraham Manor of Bristol Hospital	Survey
66.	Jefferson House	Survey
67.	Jerome Home	Survey
68.	Jewish Senior Services	Survey
69.	Khmer Health Advocates	Interview
70.	LabCorp	Interview
71.	LeadingAge Connecticut	Focus Group, Survey
72.	Leeway (Skilled Nursing Facility)	Interview, Survey
73.	Legislative Representative	Interview
74.	Legislative Representative	Interview
75.	Lord Chamberlain	Survey
76.	Meadow Ridge	Survey
77.	Mercy Community Health	Survey

	Stakeholder Organization	Engagement Type
78.	Middlebury Convalescent Home, Inc.	Survey
79.	Middlesex Hospital	Focus Group
80.	Midwestern Connecticut Council of Alcoholism (MCCA)	Interview
81.	Milford Hospital	
82.	Montowese Health & Rehabilitation Center	Survey
83.	Mystic Healthcare & Rehabilitation Center	Survey
84.	Nathaniel Witherell (SNF), The	Survey
85.	National Alliance on Mental Illness	Interview
86.	National Health Care Associates	Survey
87.	Noble Horizons	Survey
88.	Northeastern Medical Group	Interview
89.	Office of the Healthcare Advocate	Interview
90.	Office of the State Comptroller	Interview
91.	Orange Health Care Center	Survey
92.	Partnership for Strong Communities	Interview
93.	Pfizer	Interview
94.	Pierce Memorial Baptist Home, Inc., Creamery Brook	Survey
95.	Pomperaug Woods	Survey
96.	Private Citizen Privacy Advocates	Interview
97.	ProHealth	Interview
98.	Public Health Committee	Interview
99.	Quest Diagnostics	Interview
100.	Radiological Society of Connecticut	Interview
101.	Recovery Network of Programs	Interview
102.	Riverside Health & Rehabilitation Center	Survey
103.	Robert D. Russo, MD & Associates Radiology	Focus Group
104.	Saint Mary Home	Survey
105.	Shady Knoll Health Center	Survey
106.	Sharon Health Care Center	Survey
107.	Sheriden Woods Health Care Center	Survey
108.	SIM Consumer Advisory Board	Focus Group
109.	SIM PMO	Interview
110.	St. Francis Health Care Partners	Interview
111.	St. Francis Hospital and Medical Center	Focus Group
112.	St. Mary's Hospital	Focus Group
113.	St. Vincent's Health Care Partners	Interview
114.	Stamford Hospital	Focus Group
115.	Starling Medical Group	Interview
116.	Stoneridge	Survey

Stakeholder Organization	Engagement Type
117. SureScripts	Interview
118. Torrington health and Rehabilitation Center	Survey
119. Twin Maples Health Care Facility	Survey
120. UConn Health	Focus Group, Interview
121. United Connecticut Action for Neighborhoods (UCAN)	Interview
122. United Methodist Homes	Focus Group
123. UnitedHealthcare	Interview
124. Value Care Alliance	Interview
125. Vernon Manor HCC	Survey
126. Veteran’s Health Association	Interview
127. Villa Maria	Survey
128. Visiting Nurses Association Community Health	Interview
129. Walgreens	Interview
130. Waterbury Hospital	Focus Group
131. West Hartford Health & Rehabilitation Center	Survey
132. Western Connecticut Health Network	Interview
133. Western Connecticut Medical Group	Focus Group
134. Wheeler Clinic	Interview
135. Wilton Meadows Rehabilitation and Health Care Center	Survey
136. Yale New Haven	Focus Group, Interview